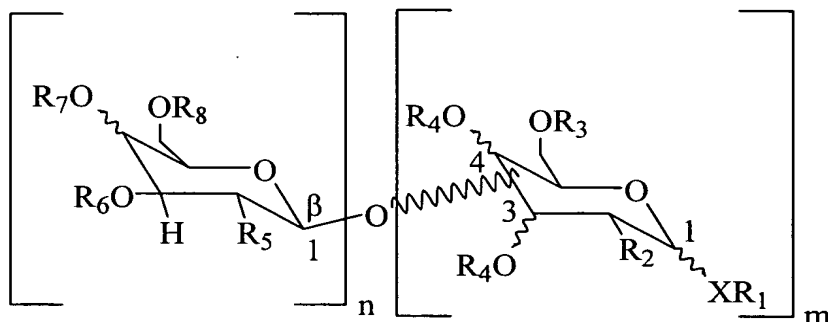


WHAT IS CLAIMED IS:

1. A method for treating pain in an individual which comprises administering an analgesic effective amount of an active agent to an individual in need of pain treatment, said active agent comprises contulakin-G which comprises the amino acid sequence Xaa₁-Ser-Glu-Glu-Gly-Gly-Ser-Asn-Ala-Thr-Lys-Lys-Xaa₂-Tyr-Ile-Leu (SEQ ID NO:1), where Xaa₁ is pyro-Glu, Xaa₂ is proline or hydroxyproline and Thr₁₀ is modified to contain an O-glycan.
2. The method of claim 1, wherein said pain is acute pain.
3. The method of claim 2, wherein said acute pain is post-trauma.
4. The method of claim 1, wherein said pain is chronic pain.
5. The method of claim 4, wherein said chronic pain results from cancer.
6. The method of claim 4, wherein said chronic pain is neuropathic pain.
7. The method of claim 4, wherein said chronic pain is inflammatory.
8. The method of claim 1, wherein the active agent is administered using a delivery system selected from the group consisting of infusion, pump delivery, bioerodable polymer delivery, microencapsulated cell delivery, injection and macroencapsulated cell delivery.
9. The method of claim 8, wherein administration is into the central nervous system.
10. The method of claim 9, wherein the central nervous system is selected from the group consisting of the intrathecal space, the brain ventricles and the brain parenchyma.
11. The method of claim 8, wherein the administration is selected from the group consisting of subcutaneous, intravenous, intra-arterial and intramuscular.

12. The method of claim 1, wherein the glycan is Gal(β 1 \rightarrow 3)GalNAc(α 1 \rightarrow).
13. The method of claim 1, wherein the glycan has the structure



wherein R₁ is Thr; X is O; R₂ is OH, NH₂, NHSO₃Na, NHAc, O-sulphate, O-phosphate, or O-glycan; R₃ is H, SO₃, PO₃, acetyl, sialic acid or monosaccharide; R₄ is H, SO₃, PO₃, acetyl or monosaccharide; R₅ is OH, NH₂, NHSO₃Na, NHAc, O-sulphate, O-phosphate, O-monosaccharide or, O-acetyl; R₆ is H, SO₃, PO₃, acetyl or monosaccharide; R₇ is H, SO₃, PO₃, acetyl or monosaccharide; R₈ is H, SO₃, PO₃, acetyl or monosaccharide; n is 0-4 and m is 1-4.

14. A method for treating pain in an individual which comprises administering an analgesic effective amount of an active agent to an individual in need of pain treatment, said active agent is selected from the group consisting of

(a) a generic contulakin-G having the following general formula Xaa₁-Xaa₂-Xaa₃-Xaa₃-Gly-Gly-Xaa₂-Xaa₄-Xaa₅-Xaa₆-Xaa₇-Xaa₈-Xaa₉-Xaa₁₀-Ile-Leu (SEQ ID NO:2), where Xaa₁ is pyro-Glu, Glu, Gln or γ-carboxy-Glu; Xaa₂ is Ser, Thr or S-glycan modified Cys; Xaa₃ is Glu or γ-carboxy-Glu; Xaa₄ is Asn, N-glycan modified Asn or S-glycan modified Cys; Xaa₅ is Ala or Gly; Xaa₆ is Thr, Ser, S-glycan modified Cys, Tyr or any hydroxy containing unnatural amino acid; Xaa₇ is Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, Arg, ornithine, homoarginine or any unnatural basic amino acid; Xaa₈ is Ala, Gly, Lys, N-methyl-Lys, N,N-dimethyl-Lys, N,N,N-trimethyl-Lys, Arg, ornithine, homoarginine, any unnatural basic amino acid or X-Lys where X is (CH₂)_n, phenyl, -(CH₂)_m-(CH=CH)-(CH₂)_mH or -(CH₂)_m-(C≡C)-(CH₂)_mH in which n is 1-4 and m is 0-2; Xaa₉ is Pro or hydroxy-Pro; and Xaa₁₀ is Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr, O-phospho-Tyr, nitro-Tyr, Trp, D-Trp, bromo-Trp, bromo-D-Trp, chloro-Trp, chloro-D-Trp, Phe, L-neo-

Trp, or any unnatural aromatic amino acid, with the proviso that the generic contulakin-G is not un-glycosylated contulakin-G;

(b) a generic contulakin-G of (a) which is modified to contain an O-glycan, an S-glycan or an N-glycan;

(c) a contulakin-G analog which comprises an N-terminal truncation of from 1 to 9 amino acids of the generic contulakin-G of (a);

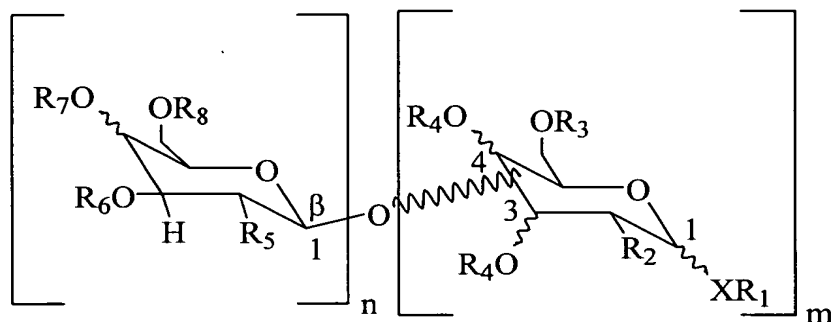
(d) a contulakin-G analog of (c), wherein a Ser-O-glycan, Thr-O-glycan or Cys-S-glycan is substituted for the amino acid residue at the truncated N-terminus;

(e) a contulakin-G analog, wherein a Ser-O-glycan, Thr-O-glycan or Cys-S-glycan is substituted for a residue at positions 1-9 of the generic contulakin-G of (a); and

(f) a contulakin-G analog which comprises an N-terminal truncation of 10 amino acids of the generic contulakin-G of (a) which is further modified to contain a Lys-N-glycan at residue 11 of the generic contulakin-G.

15. The method of claim 14, wherein said pain is acute pain.
16. The method of claim 15, wherein said acute pain is post-trauma.
17. The method of claim 14, wherein said pain is chronic pain.
18. The method of claim 17, wherein said chronic pain results from cancer.
19. The method of claim 17, wherein said chronic pain is neuropathic pain.
20. The method of claim 17, wherein said chronic pain is inflammatory.
21. The method of claim 14, wherein the active agent is administered using a delivery system selected from the group consisting of infusion, pump delivery, bioerodable polymer delivery, microencapsulated cell delivery, injection and macroencapsulated cell delivery.
22. The method of claim 21, wherein administration is into the central nervous system.

23. The method of claim 22, wherein the central nervous system is selected from the group consisting of the intrathecal space, the brain ventricles and the brain parenchyma.
24. The method of claim 21, wherein the administration is selected from the group consisting of subcutaneous, intravenous, intra-arterial and intramuscular.
25. The method of claim 14, wherein the glycan is Gal(β 1 \rightarrow 3)GalNAc(α 1 \rightarrow).
26. The method of claim 14, wherein the glycan has the structure



wherein R_1 is Thr, Ser, Cys, Asn or Lys; X is O when R_1 is Thr or Ser, or X is S when R_1 is Cys or X is N when R_1 is Asn or Lys; R_2 is OH, NH_2 , $NHSO_3Na$, $NHAc$, O-sulphate, O-phosphate, or O-glycan; R_3 is H, SO_3 , PO_3 , acetyl, sialic acid or monosaccharide; R_4 is H, SO_3 , PO_3 , acetyl or monosaccharide; R_5 is OH, NH_2 , $NHSO_3Na$, $NHAc$, O-sulphate, O-phosphate, O-monosaccharide or, O-acetyl; R_6 is H, SO_3 , PO_3 , acetyl or monosaccharide; R_7 is H, SO_3 , PO_3 , acetyl or monosaccharide; R_8 is H, SO_3 , PO_3 , acetyl or monosaccharide; n is 0-4 and m is 1-4.